Complete if Known Substitute for form 1449/PTO Application Number 10/586,015 INFORMATION DISCLOSURE Filing Date August 4, 2008 STATEMENT BY APPLICANT First Named Inventor Eric T. Ahrens Art Unit 1618 (Use as many sheets as necessary) Jagadishwar Rao Samala Examiner Name 4 CAMU-P01-002 1 of Sheet Attorney Docket Number

	U.S. PATENT DOCUMENTS						
Examiner Initials*		Cite No.1	Document Number Publication Date Number-Kind Code ² (<i>if known</i>) MM-DD-YYYY	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where	
				Applicant of Cited Document	Relevant Passages or Relevant Figures Appear		
/J.S./		AT1	2002/0192688	12-19-2002	Yang et al.		
9000		AU1	2004/0109824	06-10-2004	Hinds et al.		
9000		AV1	2005/0008572	01-13-2005	Prokop et al.		
		AW1	2005/0244384	11-03-2005	Law		
		AX1	2006/0040389	02-23-2006	Murry et al		
		AY1	2006/0239919	10-26-2006	Wickline et al.		
0000		AX1	2007/0253910	11-01-2007	Ahrens et al.		
		AA2	2007/0258886	11-18-2007	Ahrens et al.		
		AB2	2009/0263329	10-22-2009	Wickline et al.		
-		AC2	4,094,911	06-13-1978	Zollinger		
		AD2	5,785,950	07-28-1998	Kaufman et al.		
1	A STATE OF THE STA	AE2	5,958,371	09-28-1999	Lanza et al.		
- W			7,357,937	04-15-2008	Hsu et al.		
J.	S./	AG2	7,514,074	04-07-2009	Pittinger et al.		

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*		Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear			
/J.	S./	ВК	EP 1 728 788	12-06-2006	Shinetsu Chemical Co.				
		BL	WO91/14664	10-03-1991	Hider et al.				
00000			WO94/18954	09-01-1994	Clover Consolidated, Limited				
0000		BN	WO96/41647	12-27-1996	Barnes-Jewish Hospital		П		
90		во	WO97/40679	11-06-1997	Imarz Pharmaceuticals Corp.				
	80		WO05/072780	08-11-2005	Carnegie Mellon University				
90000		BQ	WO06/096499	09-14-2006	006 Washington University				
andoo.		BR	WO07/100715	09-07-2007	Washington University				
V		BS	WO08/119790	10-09-2008	Heinrich-Heine Universität Düsseldorf				
/.1.5	S./	ВТ	WO09/009105	01-15-2009	Carnegie Mellon University				

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NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of					
/J.S./	CT1	ABLAMUNITS et al., Acceleration of autoimmune diabetes by cyclophosphamide is associated with an enhanced IFN-gamma secretion pathway, J. Autoimmun. 13(4):383-392 (1999)				
/J.S <i>.i</i>	CU1	AHRENS et al., In vivo imaging platform for tracking immunotherapeutic cells, Nat. Biotechnol. 23(8):983-987 (2005)				
/J.S./	CV1	ALLEN et al., Cellular delivery of MRI contrast agents, Chem. Bio. 11(3):301-307 (2004)				
/J.S./		ANDERSON et al., Magnetic resonance imaging of labeled T-cells in a mouse model of multiple sclerosis, Ann. Neurol. 55(5):654-659 (2004)				

Complete if Known Substitute for form 1449/PTO 10/586,015 Application Number **INFORMATION DISCLOSURE** August 4, 2008 Filing Date **STATEMENT BY APPLICANT** First Named Inventor Eric T. Ahrens 1618 Art Unit (Use as many sheets as necessary) Jagadishwar Rao Samala Examiner Name 2 4 CAMU-P01-002 Sheet of Attorney Docket Number

/J,S./	CX1	ARBAB et al., Efficient magnetic cell labeling with protamine sulfate complexed to ferumoxides for cellular MRI, Blood 15:104(4):1217-23 (2004)
8	CY1	BASSE-LUSEBRINK et al., Multi-color ¹⁹ F CSI: Simultaneous detection of differently labeled
0000	CII	cells in vivo, Abstract #806, Proc. Int. Soc. Mag. Reson. 17 (2009)
8	CZ1	BILLOTEY et al., T-cell homing to the pancreas in autoimmune mouse models of diabetes: in
00000		vivo MR imaging, Radiology 236(2):579-587 (2005)
00000	CA2	BULTE et al., Preparation of magnetically labeled cells for cell tracking by magnetic resonance
		imaging. Method Enzymol. 386:275-299 (2004)
80000	CB2	CANTOR et al., Effector function of diabetogenic CD4 Th1 T cell clones: a central role for
		TNF-alpha, J. Immunol. 175(11):7738-7745 (2005)
8000	CC2	CARUTHERS et al., In vitro demonstration using 19F magnetic resonance to augment
		molecular imaging with paramagnetic perfluorocarbon nanoparticles at 1.5 Tesla, Invest. Radiology 41(3):305-31 2005.
00000000	CD2	CHENG et al., Characterization of aqueous dispersions of Fe(3)O(4) nanoparticles and their biomedical applications, Biomaterials 26(7):729-738(200)
	CE2	CROWDER, et al. "Unique perflourocarbon nanobeacons improve stem/progenitor cell
88		tracking with MRI" FASEB Journal, vol. 20, no. 4, part 1. Marca 2006, pp.A633, Abstract.
30000	CF2	CUNNINGHAM et al., Positive contrast magnetic resonance imaging of cells labeled with
		magnetic nanoparticles, Mag. Res. In Med. 53:999-1005 (2005)
8	CG2	ELSTER et al., Dyke Award. Europium-DTPA: a gadolinium analogue traceable by
		fluorescence microscopy, Am. J. Neuroradiol. 10(6):1137-1144 (1989)
	CH2	EVGENOV et al., In vivo imaging of immune rejection in transplanted pancreatic islets,
_	010	Diabetes 55(9):2419-2428 (2006)
-	CI2	EVGENOV et al., In vivo imaging of islet transplantation, Nat. Med. 12(1):144-148 (2006)
2000000	CJ2	FABIEN et al., Pancreatic lymph nodes are early targets of T cells during adoptive transfer of diabetes in NOD mice, J. Autoimmun. 8(3):323-334 (1995)
20000000	CK2	FAN et al., MRI of perfluorocarbon emulsion kinetics in rodent mammary tumours, Phys. Med. & Biol. 51:211-220 (2006)
9000	CL2	FLÖGEL et al., In vivo monitoring of inflammation after cardiac and cerebral ischemia by
		fluorine magnetic resonance imaging, Circulation 118:140-14 (2008)
9000	CM2	FLORIS et al., Blood-brain barrier permeability and monocyte infiltration in experimental
-		allergic encephalomyelitis: a quantitative MRI study, Brain. 127(Pt 3):616-27(2004)
9999	CN2	GRANOT et al., Labeling fibroblasts with biotin-BSA-GdDTPA-FAM for tracking of tumor-
9000		associated stroma by fluorescence and MR imaging, Magn, Reson. Med. 54(4):789-797
	CO2	GUDBJARTSSON et al., The Rician distribution of noisy MRI data, Magn. Reson. Med.
0000	002	34(6):910-914(1995)
	CP2	HELMER et al. On the correlation between the water diffusion coefficient and oxygen tension
8		in RIF-1 tumors, NMR in Biomedicine, 11(3):120-130 (1998)
8	CQ2	HITCHENS et al., Comparison of iron-oxide- and perfluorocarbon-based cellular contrast
8000		agents for detecting immune cell infiltration in models of organ transplant rejection, Abstract
9000		#931, Proc. Int. Soc. Mag. Reson. 17 (2009)
0000	CR2	JANJIC et al., Self-delivering nanoemulsions for dual fluorine-19 MRI and fluorescence
8		detection, J. Amer. Chem. Soc. 130:2832-2841 (2008)
00000	CS2	JIANG et al., The Design and Synthesis of Highly Branched and Spherically Symmetric
8	0.75	Fluorinated Oils and Amphiles, Tetrahedron 63(19):3982-3988 (2007)
800	CT2	KIM et al., Interplay of tumor vascular oxygenation and tumor pOZ observed using near-
0000000		infrared spectroscopy, an oxygen needle electrode, and 19F MR pO2 mapping, J. Biomed Opt 8:53-62,2003
	CU2	KIRCHER et al., In vivo high resolution three-dimensional imaging of antigen-specific cytotoxic
₩		T-lymphocyte trafficking to tumors, Cancer Res. 63(20):6838-6846(2003)
/10/	CV2	KLUG et al., 1H/19F molecular MR-imaging in mouse models of acute and chronic
/J.S./		inflammation, Abstract #3172, Proc. Int. Soc. Mag. Reson. 17 (2009)

Complete if Known Substitute for form 1449/PTO Application Number 10/586,015 **INFORMATION DISCLOSURE** August 4, 2008 Filing Date STATEMENT BY APPLICANT First Named Inventor Eric T. Ahrens 1618 Art Unit (Use as many sheets as necessary) Jagadishwar Rao Samala Examiner Name 4 CAMU-P01-002 Sheet 3 of Attorney Docket Number

/J	.S./	CW2	KRAITCHMAN et al., In vivo magnetic resonance imaging of mesenchymal stem cells in myocardial infarction, Circulation 107(18):2290-2293 (2003)				
		CX2	KRAVTZOFF et al., GD-DOTA Loaded into red blood cells. A new magnetic resonance imaging contrast agents for vascular system," Adv. in Exp. Med. and Biol. 326:347-326 (1992)				
CY2		01/0					
			LANZA et al., 1H/19F magnetic resonance molecular imaging with perfluorocarbon				
	00000		nanoparticles. In: Ahrens ET, editor. In vivo cellular and molecular imaging, Curr. Top. Dev. Biol. 70:58-78 (2005)				
	CZ2		LANZA et al., A novel site-targeted ultrasonic contrast agent with broad biomedical application,				
			Circulation 94(12):3334-3340 (1996)				
	CA3		LAUKEMPER-OSTENDORF et al., 19F-MRI of perflubron for measurement of oxygen partial				
	.		pressure in porcine lungs during partial liquid ventilation, Magn. Reson. Med. 47:82-89 2002				
		CB3	LEITER et al., The nonobese diabetic (NOD) mouse, Am. J. Pathol. 128(2):380-383 1987				
	8	CC3	MASON et al., Hexafluorobenzene: a sensitive 19F NMR indicator of tumor oxygenation, NMR				
	<u> </u>		Biomed 9:125-134; (996)				
	8	CD3	McNAB et al., Tissue oxygen tension measurements in the Shionogi model of prostate cancer				
			using ¹⁹ F MRS and MRI, MAGMA 17:288-295 (2004)				
		CE3	MEYER et al., Measurement of vascular volume in experimental rat tumors by 19F magnetic				
Ш			resonance imaging, Invest. Radiol. 28(8):710-719 (1993)				
	8	CF3	MILLER et al., Imaging the single cell dynamics of CD4+ T cell activation by dendritic cells in				
Ш		000	lymph nodes, J. Exp. Med. 200(7):847-856(2004)				
	8	CG3	MIYAZAKI et al., Predominance of lymphocytes-T in pancreatic-islets and spleen of pre-				
			diabetic non-obese diabetic (NOD) mice - a longitudinal-study, Clin. Exp. Immunol. 60(3):622-				
\vdash		0110	63 (1985)				
	8	CH3	MODO et al., Mapping transplanted stem cell migration after a stroke: a serial, in vivo				
\vdash		Cla	magnetic resonance imaging study, Neuroimage 21(1):311-31 (2004)				
		CI3	MOORE et al., Tracking the recruitment of diabetogenic CD8+ 1-cells to the pancreas in real time, Diabetes 53(6):1459-1466 (2004)				
		CJ3	MORAWSKI et al., Quantitative magnetic resonance immunohistochemistry with ligand-				
	8		targeted F-19 nanoparticles, Magn. Reson. Med. 52(6):1255-126 (2004)				
		CK3	MORAWSKI et al., Targeted Nanoparticles for Quantitative Imaging of Sparse Molecular				
	8		Epitopes with MRK, Mag. Res. in Med. 51(3):480-486 (2004)				
	000	CL3	NEUBAUER et al., Endothelial stem cell detection in vivo with unique perflourocarbon				
	8		nanoparticle labels using fluorine (F-19) MNRI at 1.5 T, Circulation 114(18)(Suppl. S): 251				
	.		(Abstract (2006))				
	8	СМЗ	PAKALA end Thelper 2 (Th2) T cells induce acute pancreatitis and diabetes in immune-				
Щ			compromised nonobese diabetic (NOD) mice, J. Exp. Med. 186(2):299-306 (1997)				
	8	CN3	PARTLOW et al., 19F magnetic resonance imaging for stem/progenitor cell tracking with				
		000	multiple unique perfluorocarbon nanobeacons, FASEB J. 21:1647-1654 (2007)				
		CO3	PELCHEN-MATTHEWS et al., Phorbol ester-induced downregulation of CD4 is a multistep				
	8		process involving dissociation from p56lck, increased association with clathrin-coated pits, and				
Н	-	CD2	altered endosomal sorting, J. Exp. Med. 178(4):1209-1222 (1993) PHILLIPS et al., MAdCAM-1 is needed for diabetes development mediated by the T cell clone,				
	8	CP3					
\vdash	8	CQ3	BDC-2.5, Immunology 116(4):525-53 (2005) PHILLIPS et al., Nondepleting anti-CD4 (2005)				
		CUS	cells, halting their destruction of pancreatic beta cells, J. Immunol. 165(4):1949-1955 (2000)				
		CR3	PIACENTI et al., Synthesis and characterization of fluorinated polyetheric amides, J. Fluor.				
	000	0.10	Chem. 68:227-225 (1994)				
			PINTASKE et al., A preparation technique for quantitative investigation of SPIO-containing				
			solutions and SPIO-labelled cells by MRI, Biomed. Tech. 50(6):174-180 (2005) English				
A	*		Abstract)				
,	10	СТЗ	RIBEIRO et al., In vivo dynamics of T cell activation, proliferation, and death in HIV-1 infection:				
/	J.S./		why are CD4+ but not CD8+ T cells depleted? Proc. Natl. Acad. Sci. USA 99(24):15572-15577				
			(2002)				

Complete if Known Substitute for form 1449/PTO 10/586,015 Application Number **INFORMATION DISCLOSURE** August 4, 2008 Filing Date STATEMENT BY APPLICANT First Named Inventor Eric T. Ahrens Art Unit 1618 (Use as many sheets as necessary) Jagadishwar Rao Samala **Examiner Name** 4 of 4 CAMU-P01-002 Sheet Attorney Docket Number

	CU3	RODRIGUEZ et al., In vitro characterization of an Fe(8) cluster as potential MRI contrast	
		agent, NMR Biomed. 18(5):300-30, (2005)	
	CV3	SCHNEIDER et al., In vivo microscopic evaluation of the microvascular behavior of FITC-	
/J.S./		labeled macromolecular MR contrast agents in the hamster skinfold chamber, Invest. Radiol.	
/0.0./		35(9):564-570 (2000)	
6W3		SHAPIRO et al., in vivo detection of single cells by MRI, Magn. Reson. Med. 55(2):242-249	
0000000	CX3	SOLOSKI, Synthesis of perfluoro (polyether) difunctional compounds, J. Fluor. Chem. 11:601-612 (1978).	
0000000	CY3	SOTAK et al., A new perfluorocarbon for use on fluorine-19 magnetic resonance imaging and spectroscopy, Magn. Reson. Med. 29:188 (1993)	
00000000	CZ3	SRINIVAS et al., Fluorine-19 MRI for visualization and quantification of cell migration in a diabetes model, Mag. Res. In Med. 58(4):725-73 (2007)	
000000000000000000000000000000000000000	CA4	TAYLOR and DEUTSCH, 19F-nuclear magnetic resonance: measurements of [O2] and pH in biological systems, Biophys J. 53: 227-233 (1988)	
0000	CB4	TONELLI et al., Linear perfluoropolyether difficultional oligomers: chemistry, properties and applications, J. Fluorine Chem. 95:51-7 (1999)	
000	CC4	TONELLI et al., Perfluoropolyether alkyl diesters: Structure effects of the alkyl group on the kinetics of the hydrolysis reactions, J. Polym. Sci. Part A: Polym Chem. 40:4266-428 (2002)	
000000000000000000000000000000000000000	CD4	TONELLI et al., Perfluoropolyether functional alignmers: unusual reactivity in organic chemistry, J. Fluor. Chem. 118(1-2):107-12 (2002)	
900	CE4	TURVEY et al., Noninvasive imaging of pancinal inflammation and its reversal in type 1 diabetes, J. Clin. Invest. 115(9):2454-246 (2005)	
000000000	CF4	VENANZI et al., Structural properties and photophysical behavior of conformationally constrained hexapeptides functionalized with a new fluorescent analog of tryptophan and a nitroxide radical quencher, Biopolymers 75(2):128-133 (2004)	
	CG4	WILSON et al., Measurement of preretinal oxygen-tension in the vitrectomized human eye using F-19 magnetic resonance spectroscopy, Arch. Ophthalmol-Chic. 110(8):1098-1100 (1992).	
000000000000000000000000000000000000000	CH4	WISNER et al., A modular lymphographic magnetic resonance imaging contrast agent: contrast enhancement with DNA transfection potential, J. Med. Chem. 40(25):3992-3996 (1997)	
0000	CI4	WU et al., In situ labeling of immune cells with iron oxide particles: An approach to detect organ rejection by cellular MRI, Proc. Natl. Acad. Sci. USA 103(6):1852-1857 2006)	
, , , , ,	CJ4	XIA et al., Tumour oxygen dynamics measured simultaneously by near-infrared spectroscopy and F-19 magnetic resonance imaging in rats, Phys. Med. Biol. 51(1):45-60, 2006	
0000000	CK4	YEH et al., Intracellular labeling of T-cells with superparamagnetic contrast agents, Magn. Reson. Med. 30(5):617-625 (1993)	_
0000	CL4	YOU et al., Detection and characterization of T cells specific for BDC2.5 T cell-stimulating peptides, J. Immunol. 170(8):4011-4020 (2003)	
V	CM4	YU et al., High-resolution MRI characterization of human thrombus using a novel fibrintargeted paramagnetic nanoparticle contrast agent, Mag. Res. In Med. 44:867-872 (2000)	
/J.S./	CN4	ZHANG et al., Synthetic applications of fluorous solid-phase extraction (F-SPE), Tetrahedron 62:11837-11865 (2006)	

Examiner	(Inandiahwar Camala) (11/14/0011)	Date	
Signature	/Jagadishwar Samala/ (11/14/2011)	Considered	

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